

1988-89
Employment Injuries
Tasmania

Catalogue Number 6301.6

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Employment Injuries Tasmania 1988-89

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Australian Bureau of Statistics
Hobart
Catalogue number 6301.6

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Inquiries

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Page	Inquiries	Inquiries about these statistics, and other unpublished data, may be made by calling Hobart (002) 20 5836 (Jenny Spencer). For other inquiries, including copies of publications, call the Information Officer on Hobart (002) 20 5800. The Tasmanian Office of the Australian Bureau of Statistics is located on the 1st Floor, 175 Collins Street, Hobart (GPO Box 66A, Hobart, 7001).
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Introduction

This bulletin presents statistics of Tasmanian employee injuries compiled from reports of workers' compensation claims for accidents and diseases occurring during 1988-89. The reports are supplied by insurance companies, self-insurers and State Government departments.

Employment injuries Until 1986-87 this publication was titled Industrial Accidents, Tasmania. The change to Employment Injuries, Tasmania has been made to reflect more accurately the content of the publication and the collection.

Accidents are generally thought of as sudden, unwanted and unforeseen occurrences. This publication also includes statistics on *diseases* which, though unwanted and unforeseen, often develop over a long period. These, together, are designated *employment injuries* because not only are occurrences at work collected (*occupational injuries*), but so are compensatable occurrences on the way to and from work (*journey cases*).

Variations in reporting The Australian Bureau of Statistics and the Department of Employment, Industrial Relations and Training, Labour and Industry Division, have worked closely with insurers to make sure the coverage and accuracy of the collection is as high as possible. Insurers generally have been co-operative, but there is no fool-proof way of checking whether reports have been received for all claims coming within the scope of the collection.

Differences in the numbers of reports received from year to year may be due as much to variations in coverage as to changes in accident experience. Care should therefore be taken when looking at trends in the numbers of accidents and diseases reported over time.

Value of statistics The main value of the statistics lies in the detailed analysis possible, demonstrated by the range of cross-classified variables available in tables in this publication. Employment injuries are classified by industry and occupation groups, agencies and types of accidents, type and bodily location of injuries, time and day of occurrence and so on.

Additional information Additional information is readily available for those tables for which only persons or general data are shown in this bulletin. A more detailed industry or occupation break-up is also available. In addition, other tables can be produced on request, using any of the data items supplied on the reporting form.

Scope of the Collection

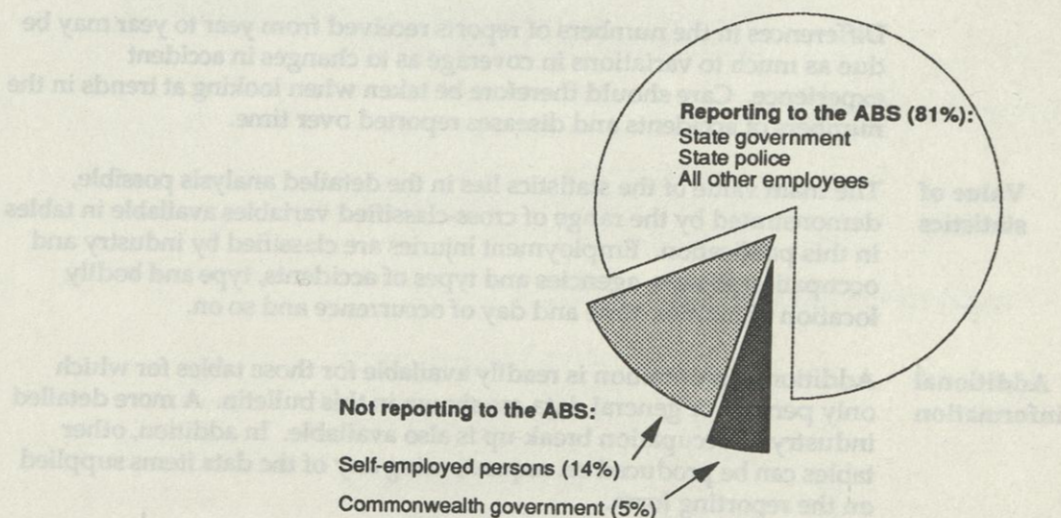
- Collection period** The statistics represent employment injuries reported by insurers as occurring during 1988-89. Estimates have been made by insurers for those employment injuries which occurred during this time but were not finalised by the time the collection was closed off in May 1990.
- Who is included** The statistics relate to persons covered under the *Tasmanian Workers' Compensation Act 1988* who have lost one complete day (or shift) or more, not counting any time lost on the day (or shift) of the occurrence.

Also included are police officers and State government departments. This means that about 81 per cent of the working population falls within the scope of the collection.

(The *coverage* is the extent to which the 81 per cent within the scope of the collection are represented in the collection.)

Workers not included in the collection consist of self-employed persons (about 14 per cent), and Commonwealth government employees (about 5 per cent).

Graph 1. Composition of total employment



- Effect of exclusions** The exclusion of self-employed persons is likely to have a marked effect on statistics for industries where self-employment is common; for example, construction, rural, and transport industries.

Defence services and communications are industries which are not covered at all, and others have reduced coverage due to the exclusion of Commonwealth government employees.

- Re-opened claims** Only original claims are covered by the tables and graphs in this bulletin. During 1988-89 there were 196 re-opened claims reported. These added a further estimated \$747 231 to the cost of employee injuries.

This year in brief

The community is likely to be aware of the cost in human terms of deaths and injuries resulting from motor vehicle accidents; these tend to be well reported on television, radio and in the press.

Road traffic accidents While it is true that road accident fatalities outnumber industrial fatalities, there are many more people injured in the course of their work than on the road.

For every person reported injured in a traffic accident, there are five people reporting employment injuries.

Table 1. Road traffic accidents and employment injuries, 1988-89

	Road traffic accidents(a)		Employment injuries	
	Deaths	Injuries	Deaths	Injuries
Males	48	1 172	9	8 400
Females	32	825	-	1 732
Persons	80	1 997	9	10 132

(a) Source publication: *Road Traffic Accidents Involving Casualties, Tasmania, 1989*; ABS catalogue number 9406.6

Employment injury numbers There were 10 141 employment injury claims reported as occurring during the 1988-89 financial year. This is an increase of 611 over the 9530 reported as occurring in 1987-88.

Reports of employment injuries to men increased by 4.2 per cent to 8409 from the 8072 reported in 1987-88. Reports involving women also increased: 1732 for 1988-89 compared to 1458 in the previous year.

Diseases Of the 10 141 claims reported, 252 were identified as diseases while 9889 related to accidents. Diseases accounted for about 2 per cent of all reports, a figure consistent with the pattern of previous years.

Deaths As in 1987-88, there were 9 deaths reported in Tasmania in 1988-89. These were all men, and compensation paid on these was an estimated \$475 000.

Extent of disability In addition to the 9 deaths, there were a further 9 cases where the injured people were unable to resume work as a result of their injuries. These are described as *permanent total disability* cases.

These, and fatalities, because there is no resumption of work, are not used in the calculation of average time lost and average daily compensation figures.

There were also 36 cases where the people were able to resume work, but in a reduced capacity and with a subsequent loss of earnings, due to *permanent partial disabilities*.

Temporary disabilities accounted for the remaining 10 087 reports, over 99 per cent of all claims.

While generally considered to be less serious than the other three types of disabilities, temporary disabilities can nevertheless involve a considerable amount of time off work and medical treatment before the affected people can resume normal duties.

Compensation For the year, an estimated total of \$19.6m was paid in compensation for all original claims reported to the Australian Bureau of Statistics, an increase of \$2.7m over the amount estimated in 1987-88. This gives an average cost for each non-fatal claim of \$1 888, and an average of \$98 for each day lost for temporary and permanent partial disability cases. In 1987-88 the average cost for each day lost was \$105.

The average cost for non-fatal claims involving men was \$1927, with a daily cost of \$104; for women it was \$1699 with a daily cost of \$75.

Table 2. Cost of claims by industry

	Cost of claims for non-fatal injuries		
	Total cost	Average per claim	Average per day(a)
	(\$)	(\$)	(\$)
Agriculture, forestry, fishing and hunting	1 667 464	2 379	93
Community services	2 789 194	2 193	98
Construction, electricity, gas and water	3 152 298	2 421	113
Finance, property and business services	252 787	2 454	105
Manufacturing	5 644 497	1 574	103
Mining	1 501 613	2 365	149
Public administration	963 748	2 077	97
Recreational, personal and other services	868 244	2 334	67
Transport and storage	1 059 290	2 230	103
Wholesale and retail trade	1 230 449	1 007	76
Total persons	19 129 584	1 888	98
Males	16 186 402	1 927	104
Females	2 943 182	1 699	75

(a) Permanent partial and temporary disability cases only.

Time lost The cost of employment injuries can also be measured in terms of the time lost as a result of an accident or disease. This collection measures time lost in terms of calendar days: the total period between the time the person stopped work and the time he or she started work again, or was declared fit to start.

In 1988-89 a total of 181 315 days were lost, an average of 18 days for each claim. This represents about 6 per cent of the total days worked in the year (about 30 million) by the *in-scope* population. This was an increase over the previous year in which 153 583 days were lost, an average then of 16 days for each report.

The total time lost by men came to 142 633 days, an average of 17 days per report, slightly more than the 16 days average reported in 1987-88. For women, time lost in total was 38 682 days, giving an average of 20 days compared with 14 the previous year.

Table 3. Time lost by Industry

Type of employment	Time lost for non-fatal injuries		
	Total time lost		Average per person
	Full-time (days)	Part-time (days)	F/t only (days)
Agriculture, forestry, fishing and hunting	17 462	548	27
Community services	25 225	2 666	21
Construction, electricity, gas and water	27 737	252	21
Finance, property and business services	2 045	368	22
Manufacturing	52 369	974	15
Mining	10 029	1	16
Public administration	9 797	88	21
Recreational, personal and other services	5 474	1 990	16
Transport and storage	8 700	157	19
Wholesale and retail trade	14 309	1 124	12
Total persons	173 147	8 168	18
Males	140 985	1 648	17
Females	32 162	6 520	20

Type of Employment

Only 1.3 per cent of male employment injuries occurred to those who worked part-time, (about 7 per cent of employed males) compared with 9.2 per cent for females working part-time. Slightly more than 46 per cent of females work part-time. Overall, 2.7 per cent of employment injuries occur to those reported as working part-time.

Table 4. Employment Injuries by Industry and type of employment

	Type of employment		
	Full-time	Part-time	Total
	(number)	(number)	(number)
Agriculture, forestry, fishing and hunting	656	47	703
Community services	1 205	67	1 272
Construction, electricity, gas and water	1 288	15	1 303
Finance, property and business services	94	10	104
Manufacturing	3 553	35	3 588
Mining	634	1	635
Public administration	459	6	465
Recreational, personal and other services	343	29	372
Transport and storage	468	7	475
Wholesale and retail trade	1 170	54	1 224
Total persons	9 870	271	10 141
Males	8 297	112	8 409
Females	1 573	159	1 732

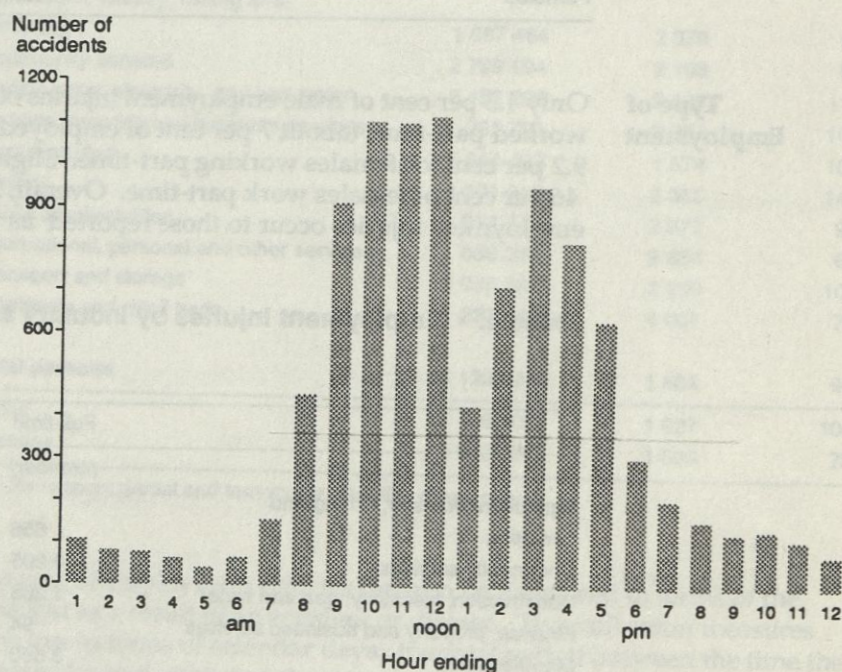
Time of occurrence

For most claims this information is readily available. In some cases, however, the actual time of the occurrence is not known. Many disease cases, for example, occur over a long period, the exact moment they start not being known. In other cases a trivial injury may develop into something more serious, the original injury having passed un-noticed.

Where the actual time is not known, the time the injury or disease was first noticed or first reported is asked for.

Graph 2 shows the distribution of employment injuries by time for 1988-89. Not surprisingly, few occur in the 'off-peak' hours; before 7 am or after 8 pm, and most occur in conventional working hours. It is interesting to note that a third of all accidents occur within the three hours preceding midday.

Graph 2. Employment injuries by hour of occurrence



Historical trends

Numbers of employment injuries

Over the last nine years the number of employment injuries reported has remained fairly close to 10 000 each financial year (the average over nine years is 9900), and there is little to discern in the way of trends over the period from 1980-81 to 1988-89.

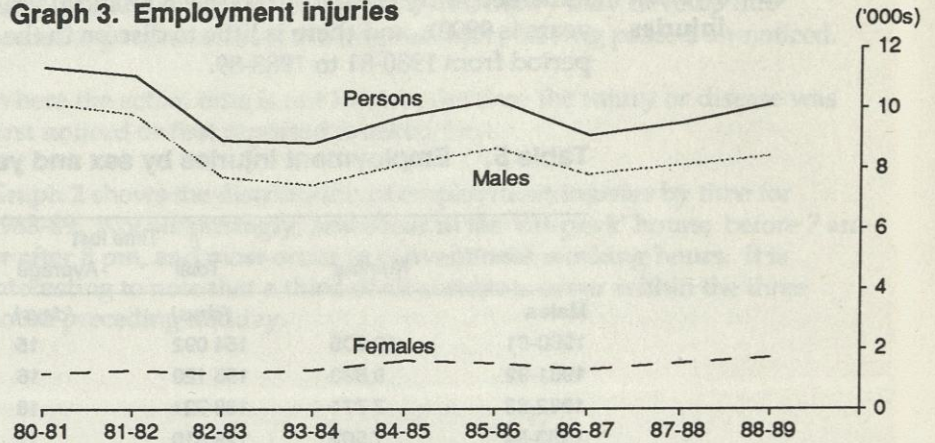
Table 5. Employment injuries by sex and year

	Number	Time lost		Compensation	
		Total	Average	Total	Average
		(days)	(days)	(\$M)	(\$ per day)
Males					
1980-81	10 305	154 092	15	9.3	57
1981-82	9 890	156 120	16	12.4	69
1982-83	7 771	138 721	18	11.8	73
1983-84	7 502	129 810	17	10.7	71
1984-85	8 231	159 328	19	14.2	76
1985-86	8 732	168 579	19	13.7	79
1986-87	7 835	141 736	18	14.5	92
1987-88	8 072	132 460	16	15.2	109
1988-89	8 409	142 633	17	16.7	104
Females					
1980-81	1 200	22 497	19	0.8	38
1981-82	1 309	30 077	23	1.7	46
1982-83	1 233	26 675	22	2.1	59
1983-84	1 286	23 110	18	1.5	56
1984-85	1 564	38 947	25	2.6	58
1985-86	1 543	44 831	29	3.1	59
1986-87	1 255	29 067	23	2.4	72
1987-88	1 458	21 123	14	1.8	83
1988-89	1 732	38 682	22	2.9	75
Persons					
1980-81	11 505	176 589	15	10.2	55
1981-82	11 199	186 197	17	14.1	66
1982-83	9 004	165 396	18	13.9	70
1983-84	8 788	152 920	17	12.2	69
1984-85	9 795	198 275	20	16.8	72
1985-86	10 275	213 410	21	16.9	75
1986-87	9 090	170 803	19	16.9	89
1987-88	9 530	153 583	16	16.9	105
1988-89	10 141	181 315	18	19.6	98

From the following graph it can be seen that if anything, the numbers of employment injuries reported by males are decreasing slightly while those for women are increasing slightly.

In 1980-81, for each woman reported injured there were 8.6 men injured. This represented 10.4 per cent of all reports. In 1988-89, reflecting the increasing participation in the workforce by women, there was one women reported injured for every 4.9 men, an increase to 17.1 per cent of all reports.

Graph 3. Employment injuries

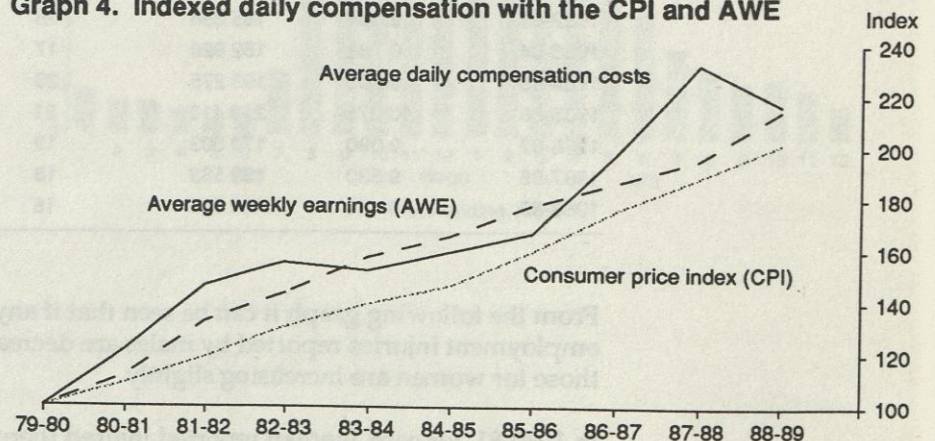


Compensation

An indicator often used to measure inflation is the Consumer Price Index (CPI). An index of daily compensation costs has been calculated using 1979-80 = 100.0 as a base year. Because compensation payments involve a large wage component, an index of average weekly earnings (AWE) for Tasmania has also been calculated. These have been plotted against the CPI for Hobart (also using 1979-80 as a base year) in the graph below.

The graph shows that in general, there has been a close correlation between CPI, AWE and daily compensation costs, except for the period 1986-87 to 1987-88. After a sharp increase in average daily compensation costs in 1987-88, it has returned to be more in line with CPI and AWE levels.

Graph 4. Indexed daily compensation with the CPI and AWE



Incidence rates

While there is value in knowing the number of employment injuries occurring within a particular industry, this value is considerably enhanced if one knows the number of people employed within the industry at the time.

Knowing the employed population allows the calculation of *incidence rates*, and thus meaningful comparisons can be made between industries.

Average employment

Table 6 below shows the average employment by sex and industry for 1988-89 obtained from the ABS's Labour Force Survey and Survey of Employment and Earnings. It should be remembered that the figures **do not** represent all those who are employed. Excluded from the figures below are Commonwealth government employees and self-employed persons as they are not within the scope of the collection.

Table 6. Average employment by Industry and sex

	Males	Females	Persons
	('000s)	('000s)	('000s)
Agriculture, fishing and hunting	4.8	1.4	6.3
Community services	12.2	23.1	35.3
Construction	7.5	0.8	8.4
Electricity, gas and water	3.5	0.3	3.8
Finance, property and business services	4.9	5.4	10.3
Forestry and logging	2.0	0.2	2.2
Manufacturing	22.0	6.0	28.0
Mining	3.0	0.3	3.3
Public administration	5.9	2.5	8.4
Recreational, personal and other services	4.1	7.4	11.5
Transport and storage	4.5	0.5	5.0
Wholesale and retail trade	16.6	13.0	29.7
Total(a)	91.0	61.0	151.9

(a) Totals may not add up exactly due to rounding.

Table 7. Distribution of employment and employment injuries

	Employment	Accidents	Diseases
	(%)	(%)	(%)
Agriculture, fishing and hunting	4.1	4.2	13.1
Community services	23.2	12.5	14.3
Construction	5.5	7.6	4.4
Electricity, gas and water	2.5	5.3	4.4
Finance, property and business services	6.8	1.1	-
Forestry and logging	1.4	2.5	2.0
Manufacturing	18.4	35.4	35.7
Mining	2.2	6.3	4.0
Public administration	5.5	4.6	3.2
Recreational, personal and other services	7.6	3.7	4.0
Transport and storage	3.3	4.8	0.8
Wholesale and retail trade	19.6	12.0	14.3
Total	100.0	100.0	100.0

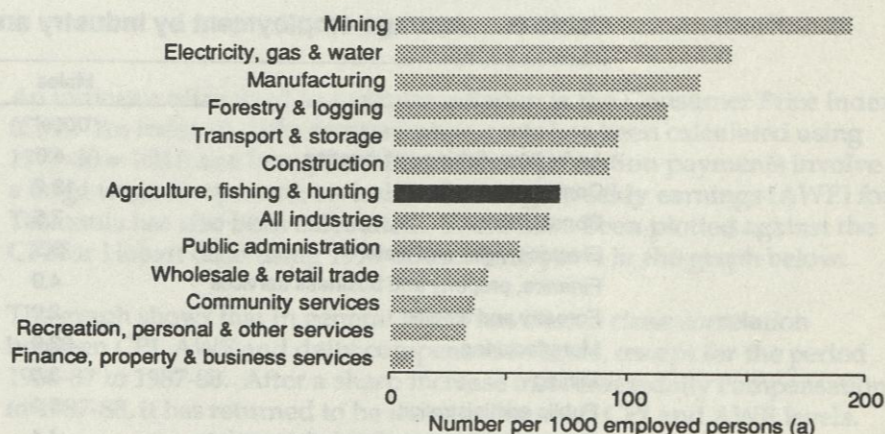
Employment injuries distribution

If all industries were equally hazardous in which to work, the distribution of employment injuries should match the distribution of the employed population working in them. Obviously some industries present more hazards than others. This can be seen in the preceding table (Table 7).

Mining, for example, employs 2.2 per cent of the collected population, but accounted for 6.3 per cent of reported employment injuries. *Finance, property and business services*, on the other hand, though employing a bigger proportion (6.8 per cent), reported only 1.1 per cent of accidents.

This is demonstrated graphically below, where the number of employment injuries for every 1000 people employed is shown.

Graph 5. Employment injury incidence rates



(a) Excludes Commonwealth government and self-employed

Incidence rates

It is clear from graph 5 that the *Mining* industry group experienced many more employment injuries (192) for every thousand people employed than did other industry groups. The average for all industries was 67 employment injuries per 1000, an increase from the 65 per 1000 reported in 1987-88.

(*Mining* actually decreased from the 243 reported last year, as did *Forestry and logging* with a decrease from 229 to 115.)

Those sectors of the Tasmanian economy at the lower end of the scale were the service industries. Lowest of all was *Finance, property and business services* (10 per 1000), followed by *Recreational, personal and other services* (32 per 1000) then *Community services* (36 per 1000).

Some care should be taken in how these figures are interpreted. It should not be assumed, for example, that miners are more careless or accident prone than real estate agents. The hazards they face each day in the normal course of their work are more numerous, therefore the risk of experiencing employment injuries is much greater.

The incidence of diseases remains very low in comparison with accidents. Only 1 out of 40 employment injuries is reported as a disease. (The actual rate is 1.7 per 1000, compared with 1.2 for 1987-88.)

As can be expected, men have a higher employment injury rate than women, 92 per 1000 men employed compared with 28 per 1000 for women.

This suggests that men are almost three times as likely to be injured at work than women. However, because men are more likely to be employed in the higher risk occupations, their injury rate is, not surprisingly, higher.

Table 8. Incidence rates by industry and sex

	1987-88	1988-89		
	Persons	Persons	Males	Females
	(rate)	(rate)	(rate)	(rate)
Agriculture, fishing, hunting	89	71	74	69
Community services	35	36	52	27
Construction	104	91	101	8
Electricity, gas and water	136	141	149	43
Finance, property and business services	9	10	11	9
Forestry and logging	229	115	125	15
Manufacturing	105	128	144	70
Mining	243	192	210	17
Public administration	60	55	71	18
Recreational, personal and other services	28	32	49	23
Transport and storage	62	95	101	40
Wholesale and retail trade	46	41	58	20
Total	65	67	92	28
Accidents	64	65	91	27
Diseases	1.2	1.7	1.8	1.5

In general, the pattern discernible last year (when incidence rates were calculated for the first time) was also evident in statistics for 1987-88, as can be seen above in Table 8.

The biggest increase in rate over the period was experienced in *Transport and storage* (50 per cent). The biggest decrease was the 50 per cent reduction in incidence for *Forestry and logging*.

These industries, however, have comparatively low employment levels coupled with low rates, with the result that small movements tend to be exaggerated.

Industrial diseases

Employment injury reports sent to the Australian Bureau of Statistics contain descriptions of the events leading to the report. *Nature of injury* codes are given on the basis of these descriptions.

Disease coding If a recognised medical condition is described, a code from the *International Classification of Diseases (9th Revision)* (ICD) can be given. About 2 per cent of all reports each year fall into this category.

Undoubtedly, the number of disease conditions that occur each year is understated. It is quite possible, for example, for a condition such as *bursitis* to be reported simply as a 'strain'. It would then miss out on being coded as a disease.

In 1988-89 there were 252 reports given ICD classifications, 2.5 per cent of the total of 10 141 received. This was an increase of 41 per cent over the 179 reported in 1987-88 (1.9 per cent of all reports for that year).

However, because of the low proportion of diseases reported each year, the movements from year to year tend to be exaggerated.

While in many cases the distinction between accidents and diseases is blurred, it is nevertheless useful to examine the occurrences commonly classified as diseases.

Table 9. Types of reported diseases

	Number	Average leave (days)	Average compensation (\$ per claim)
ICD 133: <i>Acariasis</i> (Scabies, mites, etc.)	10	4	364
ICD 354: <i>Mononeuritis of upper limb and mononeuritis multiplex</i> (Carpal tunnel syndrome, etc.)	9	95	8 232
ICD 360-379: <i>Disorders of the eye and adnexa</i>	12	3	233
ICD 460-519: <i>Diseases of the respiratory system</i>	11	5	375
ICD 692: <i>Contact dermatitis and other eczema</i>	64	11	887
ICD 726: <i>Peripheral enthesopathies and allied syndromes</i> (Bursitis, rotator cuff syndrome, etc.)	30	28	3 434
ICD 727: <i>Other disorders of synovium, tendon and bursa</i> (Synovitis, tenosynovitis, etc.)	75	24	1 662
Other reported disease conditions	41	39	6 487
Total persons	252	24	2 504
Males	162	26	3 229
Females	90	19	1 207

By far the most prevalent conditions in 1988-89 were those resulting from occupational over-use or repetitive movement. These appear in the table above as ICD 354, ICD 726 and ICD 727 and comprise the *repetitive strain injury* (R.S.I.) or *occupational overuse syndrome* (O.O.S.) group of conditions. They accounted for 45 per cent of the diseases reported.

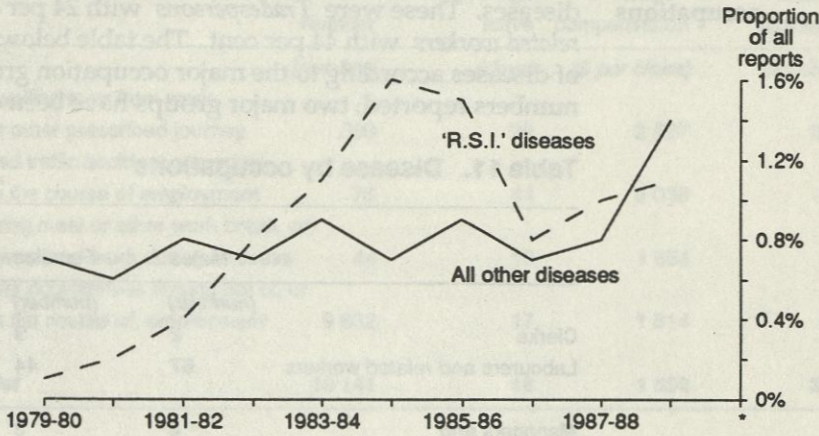
Disease trends

Diseases, with the exception of the so-called 'R.S.I.' or 'O.O.S.' group mentioned above, have not changed their incidence to any great degree over the last nine years.

As can be seen from the graph below, (except for 1988-89, which showed a slight increase to 1.4 per cent) they have hovered at around 0.8 per cent of all reported claims.

The 'R.S.I.' types, experienced a dramatic increase in incidence between 1979 and 1986, peaking to 1.6 per cent of all reports in 1984-85, before levelling off in 1986-87.

Graph 6. Incidence of 'R.S.I.' and other disease conditions



Diseases in industry

Table 10 shows that the greatest number of diseases were reported in manufacturing industries. This was true for both males and females, as it was for 1987-88.

Table 10. Number of diseases reported by industry

	1987-88	1988-89		
	Persons	Persons	Males	Females
Agriculture, forestry, fishing and hunting	24	38	28	10
Community services	24	36	10	26
Construction	6	11	11	-
Electricity, gas and water	18	11	10	1
Finance, property and business services	5	-	-	-
Manufacturing	49	90	63	27
Mining	4	10	10	-
Public administration	7	8	5	3
Recreational, personal and other services	5	10	5	5
Transport and storage	19	2	2	-
Wholesale and retail trade	18	36	18	18
Total	179	252	162	90

Because the number of diseases reported by industry each year is very small, specially when compared with the population employed in those industries, it is difficult to calculate meaningful incidence rates. It would appear that *Agriculture, forestry, fishing and hunting* had the highest rate with 4.5 cases for every 1000 people employed, with *Mining* and *Manufacturing* slightly lower with around 3 cases per 1000 employed.

The industry group with the lowest rate was *Transport and storage* with only 0.4 reports per 1000 employed.

The overall rate for diseases in 1988-89 was 1.7 per 1000, an increase over the 1.2 per 1000 reported in 1987-88.

Diseases in occupations

Two major occupation groups accounted for 68 per cent of all reported diseases. These were *Tradespersons* with 24 per cent and *Labourers and related workers* with 44 per cent. The table below shows the distribution of diseases according to the major occupation groups. Due to the small numbers reported, two major groups have been combined.

Table 11. Disease by occupations

	Males	Females	Average leave	Average compensation
	(number)	(number)	(days)	(\$ per claim)
Clerks	2	9	18	1 247
Labourers and related workers	67	44	29	2 762
Managers and administrators/Professionals	4	3	14	1 360
Para-professionals	5	7	9	689
Personal service and sales	2	12	10	633
Plant and machine operators	24	12	29	5 752
Tradespersons	58	3	18	1 232
All reported diseases	162	90	24	2 504
All employment injuries	8 409	1 732	18	1 888

The occupation groups with the longest average time off work as a result of their conditions were *Plant and machine operators* and *Labourers and related workers* with an average of 29 days per claim.

This was considerably more than the average of 24 days per claim for all diseases, or the average for all employment injuries of 18 days per claim.

Not surprisingly the average cost for claims was higher than for accidents; \$2504 for diseases compared to \$1888 for accidents.

General employment injuries statistics

In the summary of the year's statistics in this publication a comparison was drawn between road traffic accidents and employment injuries.

Occurrence of injuries In fact, there is some overlap between the two sets of statistics. Of the 10 141 employment injuries reported, 357 were described as vehicle accidents. Road traffic accidents occurring in the course of employment accounted for 64 of these. The majority (225) of the rest happened on the way to or from work.

Table 12. Occurrence of employment injuries

	Number	Average leave	Average compensation	Vehicle accidents
	(number)	(days)	(\$ per claim)	(number)
Travelling to or from work or other prescribed journey	389	29	2 597	225
Road traffic accident occurring in the course of employment	76	44	8 038	64
During meal or other work break, or away from work during a recess	44	19	1 664	6
Other occurrences arising out of, or in the course of, employment	9 632	17	1 814	62
Total	10 141	18	1 888	357

Occurrences on the way to and from work do not have to be vehicle accidents. Many people injure themselves through, for example, accidental falls and trips.

Table 13. Nature of injuries

	Males	Females	Average leave	Average compensation
	(number)	(number)	(days)	(\$ per claim)
Burns	481	55	8	952
Concussion and other head injuries	37	11	11	4 056
Contusions and crushings	1 454	307	12	1 257
Dislocations, sprains and strains	3 394	860	21	1 995
Fractures	454	75	48	5 708
Open wounds	1 551	261	12	1 134
Poisonings	62	3	14	1 728
Superficial injuries	662	41	5	538
Other, unspecified, and multiple injuries	152	29	45	8 848
Reported diseases	162	90	24	2 504
Total	8 409	1 732	18	1 888

Nature of injuries Table 12 shows that accidents involving travelling to or from work, and road traffic accidents occurring in the course of employment, involve more time lost than other occurrences. In part, this is due to the tendency for injuries to be more extensive in these types of accidents.

Table 13 supports this. *Fractures* and *Other, unspecified, and multiple injuries*, injuries consistent with vehicle accidents, involve average times lost of 40 days and more per claim, over twice the average for all other types.

By far the most common injuries, however, are *Dislocations, sprains and strains*, with 42 per cent of all reports. Table 14 shows approximately half of these occurring to the trunk.

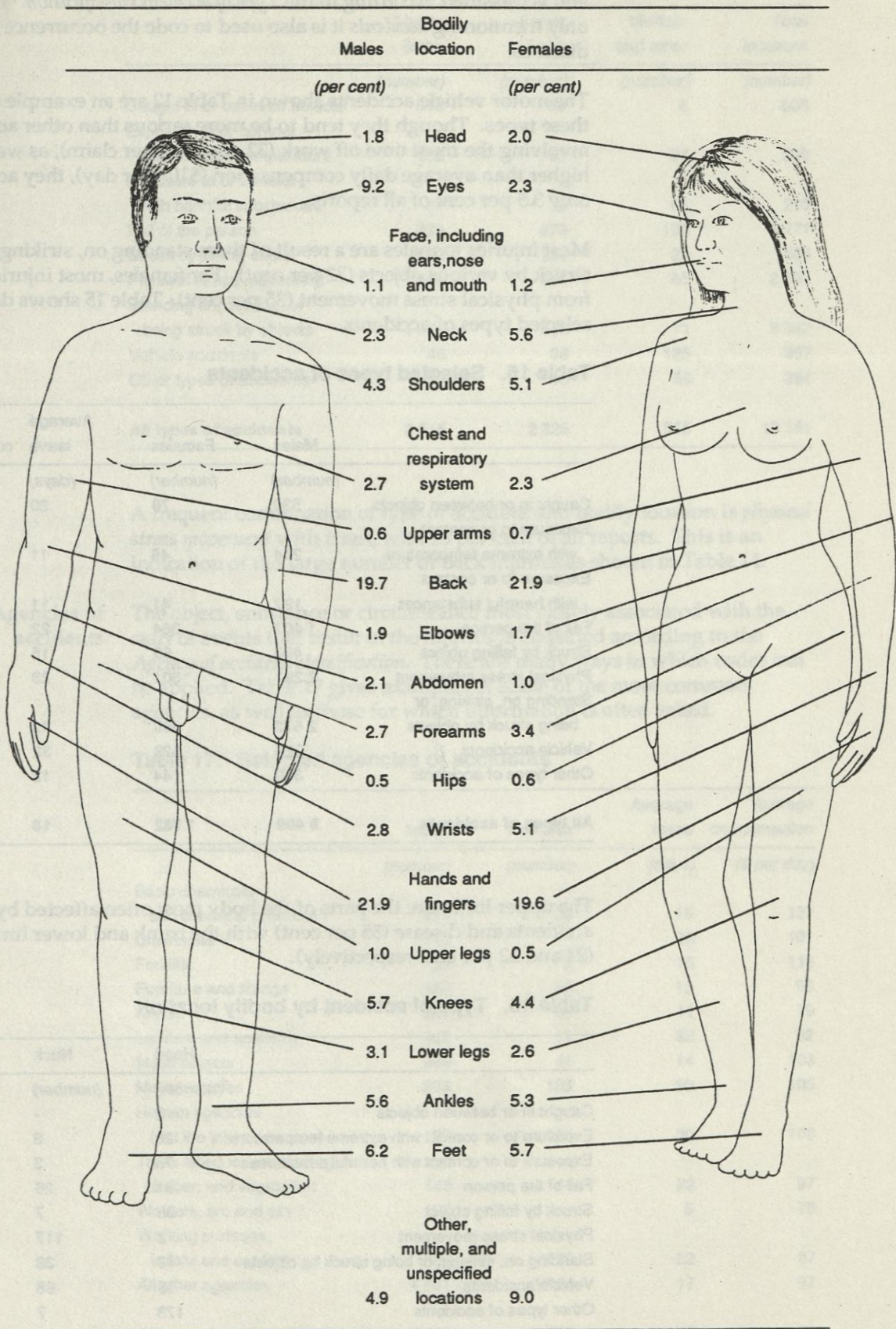
Table 14. Nature of injury by bodily location

	Head (number)	Neck (number)	Trunk (number)
Burns	216	5	13
Concussion, and other head injuries	48	-	-
Contusions and crushings	73	24	188
Dislocations, sprains and strains	-	241	2 079
Fractures	20	1	60
Open wounds	155	6	15
Poisonings	4	-	12
Superficial injuries	549	8	4
Other, multiple, and unspecified injuries	12	-	66
Reported diseases	29	4	14
Total	1 106	289	2 451
Males	1 012	193	2 026
Females	94	96	425

Table 14. Nature of Injury by bodily location (continued)

	Upper limbs (number)	Lower limbs (number)	Multiple and other (number)	Total locations (number)
Burns	159	97	46	536
Concussion and other head injuries	-	-	-	48
Contusions and crushings	677	651	148	1 761
Dislocations, sprains and strains	822	975	137	4 254
Fractures	252	175	21	529
Open wounds	1 338	258	40	1 812
Poisonings	8	5	36	65
Superficial injuries	96	32	14	703
Other, unspecified, and multiple injuries	12	14	77	181
Reported diseases	151	18	36	252
Total	3 515	2 225	555	10 141
Males	2 888	1 889	401	8 409
Females	627	336	154	1 732

Diagram1. Distribution of employment injuries by bodily location



Types of accidents The way in which a person becomes injured is called the *type of accident* and is classified according to the *Type of accident classification*. Though only mentioning *accidents* it is also used to code the occurrence of diseases.

The motor vehicle accidents shown in Table 12 are an example of one of these types. Though they tend to be more serious than other accidents, involving the most time off work (32 days lost per claim), as well as a higher than average daily compensation (\$107 per day), they account for only 3.5 per cent of all reports.

Most injuries to males are a result of them standing on, striking, or being struck by various objects (32 per cent). For females, most injuries result from physical stress movement (35 per cent). Table 15 shows details for selected types of accidents.

Table 15. Selected types of accidents

	Males	Females	Average leave	Average compensation
	(number)	(number)	(days)	(\$ per day)
Caught in or between objects	530	76	20	104
Exposure to or contact with extreme temperature	244	46	11	123
Exposure to or contact with harmful substances	192	41	11	93
Fall of the person	1 407	364	22	94
Struck by falling object	493	63	15	116
Physical stress movement	2 291	601	23	92
Standing on, striking, or being struck by objects	2 673	369	12	98
Vehicle accidents	229	128	32	107
Other types of accidents	350	44	12	125
All types of accidents	8 409	1 732	18	98

The upper limbs are the parts of the body most often affected by accidents and disease (35 per cent) with the trunk and lower limbs next (24 and 22 per cent respectively).

Table 16. Type of accident by bodily location

	Head	Neck	Trunk
	(number)	(number)	(number)
Caught in or between objects	2	-	12
Exposure to or contact with extreme temperature	26	3	10
Exposure to or contact with harmful substances	73	3	15
Fall of the person	31	26	401
Struck by falling object	35	7	29
Physical stress movement	2	117	1 792
Standing on, striking, or being struck by objects	746	38	125
Vehicle accidents	18	88	42
Other types of accidents	173	7	25
All types of accidents	1 106	289	2 451

Table 16. Type of accident by bodily location (continued)

	Upper limbs	Lower limbs	Multiple and other	Total locations
	(number)	(number)	(number)	(number)
Caught in or between objects	518	68	6	606
Exposure to or contact with extreme temperature	130	87	34	290
Exposure to or contact with harmful substances	67	10	65	233
Fall of the person	329	879	105	1 771
Struck by falling object	192	268	25	556
Physical stress movement	699	216	66	2 892
Standing on, striking, or being struck by objects	1 449	613	71	3 042
Vehicle accidents	46	38	125	357
Other types of accidents	85	46	58	394
All types of accidents	3 515	2 225	555	10 141

A frequent combination of type of accident and bodily location is *physical stress movement with trunk*, with 18 per cent of all reports. This is an indication of the large number of back injuries as shown in Table 14.

Agencies of accidents

The object, substance or circumstance most closely associated with the start of events that result in the injuries is classified according to the *Agency of accident classification*. There are many ways in which codes can be applied. Table 17 gives examples of some of the more common agencies, as well as those for which information is often asked.

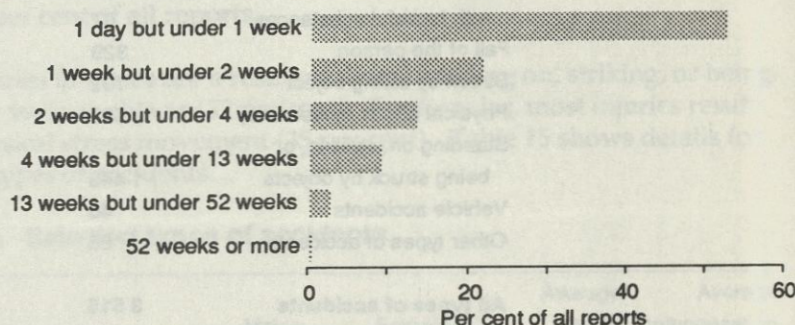
Table 17. Selected agencies of accidents

	Males	Females	Average leave	Average compensation
	(number)	(number)	(days)	(\$ per day)
Basic chemicals and chemical products	210	23	15	137
Chainsaws	38	-	26	101
Forklifts	62	3	16	116
Furniture and fittings	183	80	13	96
Knives	289	68	11	79
Ladders and scaffolds	185	19	32	92
Metal objects	989	46	14	103
Motor vehicles	383	135	30	105
Human agencies (not the injured person)	87	124	30	108
Trees felled for processing, timber; and vegetation	545	41	22	97
Welders, arc and oxy	195	-	5	78
Working surfaces, indoor and outdoor	382	159	22	87
All other agencies	4 861	1 034	17	97
All agencies of accidents	8 409	1 732	18	98

Duration of leave

Though many people are injured quite severely at work, and are away for long periods with high amounts of compensation being paid, it is significant that over half the reports show a time loss of less than a week. Because only claims involving a time loss of one day or more are reported, the figures understate the number of employment injuries with a time loss of less than a week.

Graph 7. Duration of leave



A rule of thumb used throughout the industry is that there are as many injuries involving less than a day as there are one day or more. Because there are about 10 000 of the latter reported each year, it means that around 20 000 employment injuries occur in total each year.

Table 18. Leave shorter and longer than one week (a)

	Males	Females	Total leave	Total compensation
	(number)	(number)	(days)	(\$)
1 day but under 1 week	4 404	912	15 736	2 019 325
1 week or more	3 988	819	165 579	15 734 763
Total	8 392	1 731	181 315	17 754 088

(a) excludes fatalities and permanent total disability cases.

Table 19. Duration of leave (a)

	Males	Females	Average leave	Average compensation
	(number)	(number)	(days)	(\$ per day)
1 day but under 1 week	4 404	912	3	128
1 week but under 2 weeks	1 835	349	10	89
2 weeks but under 4 weeks	1 120	234	19	94
4 weeks but under 6 weeks	365	76	34	98
6 weeks but under 8 weeks	203	32	48	97
8 weeks but under 13 weeks	205	38	70	107
13 weeks but under 26 weeks	162	48	129	100
26 weeks but under 52 weeks	61	25	241	106
52 weeks or more	37	17	522	77
Total	8 392	1 731	18	98

(a) excludes fatalities and permanent total disability cases.

Table 18 shows that although injuries involving less than a week appear on over half the reports, they account for only 9 per cent of the time lost and 11 per cent of the compensation paid. Of interest is the fact that Table 19 shows daily compensation is highest for these accidents but lowest for those with the longest duration of leave.

Selected industries

Tables elsewhere in this publication showing statistics for industry groups are, of necessity, fairly general. Table 20 gives statistics for industries about which information is often sought. The table shows that some specific industries experience quite costly claims; for example *Manufacturing of paper and paper products* with an average of \$160 per day, *Manufacturing of wood, wood products and furniture* with an average of \$158 per day, and *Mining* with \$149 per day.

Of the selected industries, the *Retail and wholesale trade* industries along with *Recreational, personal and other services* appear to have relatively minor employment injuries, with less than average days away from work and less than average daily compensation.

Information on specific industries not included in the table can be made available on application to the Australian Bureau of Statistics.

Table 20. Selected Industries

	Males	Females	Average leave	Average compensation
	(number)	(number)	(days)	(\$ per day)
Agriculture and services to agriculture	335	92	21	73
Community services	637	635	22	98
- hospitals and nursing homes	160	367	29	99
Forestry and logging	250	3	26	134
Manufacturing of				
- food, beverages and tobacco	753	247	12	82
- textiles, clothing and footwear	91	101	16	70
- wood, wood products and furniture	302	13	16	158
- paper and paper products	228	9	14	160
- basic and fabricated metal products	1 143	18	13	116
- miscellaneous manufacturing	191	14	33	88
Mining	630	5	16	149
Public administration	419	46	21	97
- local government	378	19	21	100
Recreational, personal and other services	199	173	20	67
- restaurants, hotels and accommodation	72	88	16	68
Retail trade	386	193	13	68
- grocers, confectioners and tobacconists	79	92	12	54
Wholesale trade	572	73	12	84
- building and hardware	202	3	9	81
All other industries	2 273	110	21	90
Total, all Industries	8 409	1 732	18	98

Injuries by age

It is not surprising that most employment injuries occur to those aged between 20 and 29, as this age group accounts for about 25 per cent of all employed persons. While younger people experience more injuries than older people, they also have less costly accidents.

This may be in part due to their having lower wages and salaries, but could also be due to their injuries being generally less serious. This is supported by their short periods away from work (12 days on average) in comparison with the overall average (18 days), and that of older age groups (around 20 days or more).

Table 21. Employment injuries by age groups

	Males	Females	Average leave	Average compensation
	(number)	(number)	(days)	(\$ per day)
Under 20 years	976	235	11	61
20 to 29 years	3 091	580	13	99
30 to 39 years	2 069	363	19	108
40 to 49 years	1 208	371	25	91
50 to 59 years	734	145	26	99
60 years and over	152	13	30	125
Age not stated	179	25	22	108
Total	8 409	1 732	18	98

Injuries by occupation

As can be seen in Table 22, *Plant and machine operators* experience quite high average daily compensation payments, \$119 per day, and *Clerks* the lowest with only \$77 per day.

Table 22. Cost of claims by occupation groups

	Cost of claims for non-fatal injuries		
	Total cost	Average per claim	Average per day(a)
	(\$)	(\$)	(\$)
Clerks	355 395	1 383	77
Labourers and related workers	7 857 625	2 017	94
Managers and administrators	340 637	2 198	83
Para-professionals	740 464	2 460	98
Personal service and sales	1 239 270	2 435	83
Plant and machine operators	4 107 698	2 186	119
Professionals	501 824	2 271	90
Tradespersons	3 986 671	1 368	97
Total persons	19 129 584	1 888	98

(a) excludes fatalities and permanent total disability cases

Managers and administrators have the longest periods off work (26 days on average), though surprisingly they have a less than average daily compensation figure of \$83. Tradespersons have the shortest time away from work (14 days).

Table 23. Time lost by occupation groups

	Males	Females	Total leave(a)	Average leave(a)
	(number)	(number)	(days)	(days)
Clerks	88	169	4 627	18
Labourers and related workers	3 233	664	77 160	20
Managers and administrators	134	22	4 080	26
Para-professionals	174	129	7 530	25
Personal service and sales	183	326	9 152	18
Plant and machine operators	1 735	146	33 235	18
Professionals	108	113	5 592	25
Tradespersons	2 754	163	39 939	14
Total	8 409	1 732	181 315	18

(a) excludes fatalities and permanent total disability cases.

National Data Set Statistics

Employment injuries statistics for the whole of Australia are hard to come by, mainly because there is no national collection as such. Each State's collection is controlled by its own legislation, with resulting differences between States in scope, definitions and other aspects of the collection.

Worksafe Australia

Worksafe Australia is a Commonwealth organisation involved in occupational health and safety matters, and is charged with the task of trying to produce National statistics. In doing this it has to compile elements common to all the States' collections to assemble a *National Data Set*.

The following tables for 1988-89 are constructed to meet National Data Set requirements. Because Tasmanian statistics are already very close to those required for the National Data Set, there are only a few modifications needed.

The two main differences between these and other tables in this publication are:

- National tables include only those reports involving a time loss of one week or more.
- *Journey cases* (occurrences on the way to and from work) are excluded, as are *Recess cases* (occurrences during recesses or work breaks).

Table 18 presented earlier shows that the effect of these exclusions is to cut by about half the number of reportable injuries.

Table 24. Cost of claims by major industry groups, Tasmania(a)

	Cost of claims for non-fatal injuries		
	Total cost	Average per claim	Average per day(b)
	(\$)	(\$)	(\$)
Agriculture, forestry, fishing and hunting	1 547 602	3 667	92
Mining	1 251 054	3 934	146
Manufacturing	4 579 941	2 966	101
Electricity, gas and water	995 818	3 569	83
Construction	1 761 868	5 275	96
Wholesale and retail trade	987 884	1 964	76
Transport and storage	918 511	4 064	98
Finance, property and business services	214 498	4 378	119
Public administration	838 289	3 828	96
Community services	2 215 368	4 396	99
Recreational, personal and other services	795 785	3 901	63
Total persons	16 106 618	3 500	96
Males	13 760 507	3 564	103
Females	2 346 111	3 166	72

(a) Journey cases excluded. Cases involving a time loss of one week or more.

(b) Permanent partial and temporary disability cases only.

Table 25. Time lost by major industry groups, Tasmania(a)

	Males	Females	Total leave(b)	Average leave(b)
	(number)	(number)	(days)	(days)
Agriculture, forestry, fishing and hunting	368	54	16 863	40
Mining	316	2	8 524	27
Manufacturing	1 382	163	44 988	29
Electricity, gas and water	272	7	11 988	43
Construction	331	4	12 389	37
Wholesale and retail trade	415	90	12 304	25
Transport and storage	217	9	7 826	35
Finance, property & business services	31	19	1 799	37
Public administration	200	20	8 743	40
Community services	232	272	21 846	43
Recreational, personal and other services	103	101	6 750	33
Total	3 867	741	154 020	34

See footnotes at the bottom of the page.

Table 26. Cost of claims by major occupation groups, Tasmania(a)

Cost of claims for non-fatal injuries

	Total cost	Average per claim	Average per day(b)
	(\$)	(\$)	(\$)
Managers and administrators	308 574	3 086	80
Professionals	311 677	5 109	99
Para-professionals	596 684	4 590	93
Tradespersons	3 197 695	2 612	96
Clerks	252 755	3 045	79
Personal service and sales	1 097 682	4 900	85
Plant and machine operators	3 425 700	3 672	115
Labourers and related workers	6 915 851	3 744	92
Total persons	16 106 618	3 500	96

See footnotes at the bottom of the page.

Table 27. Time lost by major occupation groups, Tasmania(a)

	Males	Females	Total leave(b)	Average leave(b)
	(number)	(number)	(days)	(days)
Managers and administrators	84	17	3 863	39
Professionals	33	28	3 141	51
Para-professionals	72	59	6 421	49
Tradespersons	1 146	79	33 399	27
Clerks	33	50	3 206	39
Personal service and sales	84	140	7 263	33
Plant and machine operators	875	60	28 473	31
Labourers and related workers	1 540	308	68 254	37
Total	3 867	741	154 020	34

(a) Journey cases excluded. Cases involving a time loss of one week or more.

(b) Permanent partial and temporary disability cases only.

Definitions and other information

The following definitions have been adopted for this collection:

Employment injury: An *employment injury* results in a compensatable claim under the Workers' Compensation Act 1988, and has the following characteristics:

- The employment injury arises out of a work-related event.
- It leads to a loss of time of one complete day (or shift) or more, not counting any time lost on the day (or shift) of the occurrence.
- It results in either a temporary or permanent total incapacity, or death.
- It involves a claim for payment.

Type of accident: The *type of accident* is currently defined as the manner of contact of the injured person with the object or substance, or the exposure or movement of the injured person which resulted in the injury or disease.

In some cases the choice between the above alternatives results in conflict; e.g. a worker falls from a ladder and grabs a hot pipe to prevent fall. In the first alternative this would relate to the hot pipe. In the second it would refer to the fall from a height. In such situations the type of accident is selected according to which event caused the more severe injury.

The type of accident is classified according to the *Type of Accident Classification*.

Agency of accident: The *agency of accident* is currently defined as the object, substance or action most closely associated with the start of the events that led to the injury or disease and which in general could have been guarded against or corrected.

A distinction should be made between the *agency of injury* and *agency of accident*; for example, a fire damp explosion results in a miner being crushed by a beam. The agency of the accident is the material responsible for the fire damp explosion, while the agency of the injury is the beam itself.

The agency of accident is classified according to *Agency of Accident Classification*.

Cost of claims: The *cost of claims* consists of all compensation for claims reported during the financial year including the following:

- wages lost;
- hospital and medical expenses;
- legal costs (excluding common law claims); and
- lump sum settlements.

Where final details are unavailable, insurers are asked to provide estimates. This is most likely to occur in those cases involving fatalities or serious injuries. Care must therefore be taken before drawing conclusions based on variations in cost of claims patterns.

Time lost: The *time lost* is the period of time between the date ceased work due to the employment injury and the date work was resumed or the person was declared fit to resume work.

This is not necessarily the paid time lost. It includes paid days off but may also include weekends, holidays or periods for which compensation was not paid. An injured person may not necessarily be prevented from working in a second job during this period.

In the case where several periods of absence are involved it is the sum of those periods.

Date and time of employment injury: The *employment injury date* is the date the accident or disease was reported to have occurred. Similarly, the *time of employment injury* is the time of day the accident or disease was reported to have occurred.

In some cases, especially with diseases and conditions that develop slowly over a period of time, the actual time or date of the occurrence may not be known. In these the date and time the condition was first noticed or reported is accepted.

Time of employment injury was collected for the first time in 1987-88.

Extent of disability: The *extent of disability* is the degree to which a person is affected as a result of an employment injury, and is classified according to one of four outcomes as described below.

- A *temporary disability* is one where the person affected is able to resume work in his normal occupation after recovering.
- A *permanent partial disability* is one where, as a result of the employment injury, a person is both prevented from returning to his or her normal occupation and incurs a loss of earnings.
- A *permanent total disability* is where the employment injury renders the affected person totally and permanently unfit for any type of work.
- A *death* is recorded if it is directly attributable to the injuries sustained.

Industry: The predominant *industry* undertaken at the location at which the employment injury occurred is classified according to the *Australian Standard Industrial Classification (ASIC), 1983 edition*.

Occupation: The normal *occupation* of the affected person is classified according to the *Australian Standard Classification of Occupations (ASCO), 1987 edition*. Prior to 1987-88 occupation was coded according to the *Classification and Classified List of Occupations (CCLO)*. Whilst not strictly comparable with years prior to 1987-88, it is still possible to produce time-series data for some specific occupations.

Type of employment: *Type of employment* was introduced for the first time in 1987-88. It is used to find out whether the injured person worked full time or part time, and is defined as follows:

- *Full-time employees* are those (permanent, temporary or casual) who normally work for the full agreed or award hours for a full-time employee in their occupation; or, if no agreed or award hours apply, for 35 hours or more a week.
- *Part-time employees* are all those not included in the definition above.

Original claim: *Original claims* are cases which involve the first claim against an insurer for compensation for an employment injury.

Re-opened claim: *Re-opened claims* are those which had been closed previously but for which further incapacity or medical treatment has been accepted by the insurer as being attributable to the original employment injury.

Incidence rate: The *incidence rate* is the number of accidents or diseases reported per 1000 employed persons, adjusted to exclude from those employed persons self-employed persons and Commonwealth government employees. Both these groups are not within the scope of the collection.

Related ABS publications:

- *Employment Injuries, Victoria* (6303.2), annual
- *Employment Injuries, Queensland* (6301.3), annual
- *Industrial Accidents, South Australia* (6301.4), annual

All publications produced by the ABS are listed in the annual *Catalogue of Publications* (1101.0). This is available free of charge from any ABS office.

Standard symbols: The following standard symbols are used in this publication:

- n.a not available for separate publication but included in totals where applicable.
- nil or less than half the unit shown.

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